

REMARKS

The Applicant thanks the Examiner for the careful consideration of this application and for the courtesy of an interview on May 12, 2009. The Office Action dated March 20, 2009 has been received and its contents carefully considered. Claims 1, 3-18 are currently pending in this application. Claim 1 is amended to include the subject material of claim 2. Further support for the amendments may be found in the examples. Based on the foregoing amendments and the following remarks, the Applicant respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Amendments

Based on the Examiner's comments during the interview of May 12, 2009, claim 1 has been amended to more clearly define the invention. The claim now clearly states the MVR value of the polymer material of component **a** that is measured and defines the invention. The amended claim 1 also incorporates the subject matter of claim 2, and defines the specific polymer materials which make up component **a** of the invention.

Claim Rejection – 35 U.S.C. § 112

In paragraph 1 of the Office Action, the Examiner rejects claims 2, 12, 17 and 18 under 35 U.S.C. 112, second paragraph as indefinite. The Examiner states that he is unclear concerning the composition comprising 75-95% polymer and 5-50% filler, since the composition is more than 100%. Applicants point out that claim 2 is dependent from claim 1, which states that the hot-melt adhesive/filler material compound comprising a) one or several hot-melt adhesives in an amount of 50-95 weight % and b) one or several filler materials in amounts of 50 to 5 weight percent. Claim 2 further discloses that component **a** comprises 1) a linear polyester in amounts of 75-95 weight % and/or a thermoplastic polyurethane in amounts of 75-95 weight %, together with 2) ethylene vinyl acetate copolymers in amounts of 0-25 weight %. The filler material, in amounts of 50-5 weight % is selected from particular materials. It is clear that the 75-95% is describing the percentage of particular polymer in component **a**, not the hot-melt adhesive/filler material compound. To clarify

this point, the claim has been amended to state that the filler material is part of component **b**, and not part of component **a**. Applicants respectfully request the rejection be reconsidered and withdrawn.

Claim Rejection - 35 U.S.C. §103(a)

In paragraph 5 of the Office Action, the Examiner rejected claims 1-18 under 35 U.S.C. 103(a) over, alternatively, Brehmer et al., Goldberg et al., or British United Shoe Machinery Ltd. (WO 94/03211), in view of, alternatively, Gaku et al, Oien, or Lees et al., with Reith as evidence. The individual references have been discussed extensively in the previous responses.

As amended, component a of claim 1 comprises a mixture of 1) a linear polyester in amounts of 75 to 100 weight % and/or a thermoplastic polyurethane in amounts of 75 to 100 weight %, together with 2) ethylene vinyl acetate copolymers in amounts of 0 to 25 weight % with a vinyl acetate content of 10 to 40 weight %. This is in contrast with the compositions of Goldberg et al. which requires a latex polymer as a primary component. For this reason at least, the rejections in view of Goldberg et al. should be reconsidered and withdrawn.

As discussed in previous responses, the compositions have the unexpected result of being recyclable, since they do not require a backing, a feature which neither Goldberg et al. nor British Shoe Machinery Ltd. recognize or disclose. The compositions of Goldberg et al. and WO 94/03211 both require a fabric or other backing for support, indicating that the materials are too soft for use in shoe manufacture. Applicants assert that the use of the inventive compositions in the manufacture of support materials for shoes is relevant, since it illustrates an unexpected property of the inventive compositions, particularly with respect to WO 94/03211 which describes material for orthopaedic splinting and casting. One of ordinary skill would not have a reason to modify the orthopaedic splinting and casting material described in WO 94/03211 to produce a material for use in the manufacture of shoes. For at least these reasons, the rejections with respect to Goldberg et al. and WO 94/03211 should be reconsidered and withdrawn.

Concerning Brehmer et al., the Applicants have compared the compositions of the invention with compositions described in Examples 1 and 3 of Brehmer et al. and shown that the compositions disclosed by Brehmer et al. are not within the scope of the present claims. The Examiner has rejected the comparison, and stated that the comparison does not compare the closest prior art. Applicants disagree, and feel that the comparison is sufficient to show that the compositions of Brehmer et al. do not fall within the scope of the present claims, and that one of ordinary skill has no reason to modify the teachings of Brehmer et al. to produce the claimed product. During the interview of May 12, 2009, the Examiner stated that a more persuasive comparison would be to use chalk or wood fiber as a filler material, rather than the plastic fillers described by Brehmer et al. In response, Applicants draw the Examiner's attention to Example 7 of the specification, which describes a material composed of poly(epsilon)-caprolactone (component a) having an average molecular weight of 80,000 g/mol and chalk particles (component b) with an average size of 45µm. As shown in Table 1, this composition has an MVR value of 8.2, which is higher than the range required by claim 1.

This comparison further illustrates the Applicant's position that it is not the materials alone which determine the suitable properties of the hot-melt adhesive/filler material compound, but the **combination** of the materials. Clearly, the combination of poly(epsilon)-caprolactone and chalk filler alone does not necessarily produce the desired composition with the required properties defined by claim 1. Brehmer et al. provides no direction of how to modify the materials described or which particular properties are desirable. Brehmer et al. does not teach or recognize the MVR value of the polymer material used in the hot-melt adhesive of component a, or the properties of the final product required by claim 1. Furthermore, as has been shown in the comparisons, the compositions of Brehmer et al. do not inherently have the properties required by claim 1, since the required properties do not **necessarily result** simply from the combination of hot-melt adhesive polymer and filler material disclosed by Brehmer et al. Brehmer et al. does not provide a reason or direction to modify the compositions to produce the properties required by claim 1. For this reason, a *prima facie* case of obviousness based on Brehmer et al. can not be supported. Applicants respectfully request the rejection be reconsidered and withdrawn.

The secondary references do not cure the deficiencies of Brehmer et al. being cited only to allege that the general process is known (See page 4 of the Office Action). The combined references do not therefore support a *prima facie* case of obviousness against claim 1 by adding the subject matter not disclosed by Brehmer. For at least this reason, the Applicants respectfully request the rejections be withdrawn.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

The Commissioner is authorized to charge any deficiency in any patent application processing fees pursuant to 37 CFR § 1.17, including extension of time fees pursuant to 37 CFR § 1.17(a)-(d), associated with this communication and to credit any excess payment to Deposit Account No. 22-0261.

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Respectfully submitted,

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